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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,422	11/07/2006	Eggert Stockfleth	50125/084002	7550
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CLARK & ELBING LLP 101 FEDERAL STREET BOSTON, MA 02110				
EXAMINER				
MI, QIUWEN				
ART UNIT		PAPER NUMBER		
1655				
NOTIFICATION DATE		DELIVERY MODE		
06/17/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentadministrator@clarkelbing.com

Office Action Summary

Application No.

10/574,422

Applicant(s)

STOCKFLETH, EGGERT

Examiner

QIUWEN MI

Art Unit

1655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-6 and 8-35 is/are pending in the application.
- 4a) Of the above claim(s) 33 and 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-6, 8-32 and 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The finality of the case is hereby withdrawn.

Applicant's amendment in the reply filed on 4/24/08 is acknowledged. Any rejection that is not reiterated is hereby withdrawn.

Claims Pending

Claims 1, 3-6, and 8-35 are pending. Claims 2 and 7 are cancelled. Claims 33 and 34 are withdrawn. Claims 1, 3-6, 8-32, and 35 are examined on the merits.

Specification/Abstract Objections

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In the instant case, Applicant is required to delete "The present invention refers to" on line 1 of the Abstract to be more clear and concise. The first letter of "a" in line 1 should be capitalized after the deletion.

Claim Rejections –35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 6, 8-20, and 29 are rejected under 35 USC § 102 (b) as being anticipated by Bickers et al (Novel approaches to chemoprevention of skin cancer, The Journal of Dermatology, 27: 691-695, 2000), as evidenced by Dou et al (US 2002/0151582)*.

This is a new rejection.

Bickers et al teach that “we demonstrated that green tea, black tea and constituent polyphenols protect against chemical- and ultraviolet B (UVB)-induced carcinogenesis and reduce the growth of established tumors in skin” (see Abstract). Bickers et al also teach that “we have found that oral administration of a standardized green tea extract (SGTE) prior to and during treatment of SKH-1 mice diminished PUVA-induced skin hyperplasia and hyperkeratosis (pre-cancerous skin lesion)” (see Abstract); “Topical application of SGTE to human skin prior to PUVA-treatment inhibited the delayed skin inflammatory response”; “Similarly, oral and topical administration of standardized black tea extract and its two major polyphenolic sub-fractions protect against UVB-induced erythema in SKH-1 mice” (see Abstract). Bickers et al state that “both black and green tea and their constituents inhibit the tumor initiation, promotion and malignant progression stages of multi-step skin carcinogenesis” (page 693, 1st column, 2nd

paragraph). Bickers et al indicate that “several experimental studies conducted in human skin have shown the efficacy of tea constituents as inhibitors of carcinogenesis-associated surrogate markers or inflammation (page 693, 2nd column, 2nd paragraph). Bickers et al conclude that “we also observed that topically applied green tea is effective in abrogating PUVA-induced inflammatory responses in human skin” (page 693, 2nd column, 2nd paragraph).

As evidenced by Dou et al (US 2002/0151582), green tea contains polyphenol compounds EGCG (formula I and II in claims 13 and 14 are thus met), ECG, GCG, or CG (claim 3).

Therefore, the reference is deemed to anticipate the instant claim above.

Claim Rejections –35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-6, 8-26, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bickers et al (Novel approaches to chemoprevention of skin cancer, The Journal of Dermatology, 27: 691-695, 2000), as evidenced by Dou et al (US 2002/0151582)*.

This is a new rejection.

Bickers et al teach that “we demonstrated that green tea, black tea and constituent polyphenols protect against chemical- and ultraviolet B (UVB)-induced carcinogenesis and reduce the growth of established tumors in skin” (see Abstract). Bickers et al also teach that “we have found that oral administration of a standardized green tea extract (SGTE) prior to and during treatment of SKH-1 mice diminished PUVA-induced skin hyperplasia and hyperkeratosis (pre-cancerous skin lesion)” (see Abstract); “Topical application of SGTE to human skin prior to PUVA-treatment inhibited the delayed skin inflammatory response”; “Similarly, oral and topical administration of standardized black tea extract and its two major polyphenolic sub-fractions protect against UVB-induced erythema in SKH-1 mice” (see Abstract). Bickers et al state that “both black and green tea and their constituents inhibit the tumor initiation, promotion and malignant progression stages of multi-step skin carcinogenesis” (page 693, 1st column, 2nd paragraph). Bickers et al indicate that “several experimental studies conducted in human skin have shown the efficacy of tea constituents as inhibitors of carcinogenesis-associated surrogate markers or inflammation (page 693, 2nd column, 2nd paragraph). Bickers et al conclude that “we also observed that topically applied green tea is effective in abrogating PUVA-induced inflammatory responses in human skin” (page 693, 2nd column, 2nd paragraph).

As evidenced by Dou et al (US 2002/0151582), green tea contains polyphenol compounds EGCG (formula I and II in claims 13 and 14 are thus met), ECG, GCG, or CG (claim 3).

Bickers et al do not teach the amount of the polyphenols in the composition.

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to use the inventions of Bickers et al since they provide scientific data for novel approaches to chemoprevention of skin cancer, one of ordinary skill in

the art would have been motivated to make the modifications. The result-effective adjustment in conventional working parameters (e.g., determining an appropriate amount of the each polyphenol components as claimed isolated from green tea within the composition) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Since Bickers et al teach administering green tea extract (SGTE) prior to and during treatment of SKH-1 mice diminished PUVA-induced skin hyperplasia and hyperkeratosis, and hyperkeratosis is not a hyperplasia, Condyloma acuminata, warts, and cervical intra-epithelial neoplasia, thus the limitation of claim 5 is met.

From the teachings of the references, it is apparent that one of the ordinary skills in the art would have had a reasonable expectation of success in producing the claimed invention.

Thus, the invention as a whole is *prima facie* obvious over the references, especially in the absence of evidence to the contrary.

Claims 1, 3-6, 8-32, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bickers et al (Novel approaches to chemoprevention of skin cancer, The Journal of Dermatology, 27: 691-695, 2000), in view of Brash et al (US 2002/0198161), and further in view of Voet (US 6,723,750), as evidenced by Dou et al (US 2002/0151582)*.

This is a new rejection.

Bickers et al teach that “we demonstrated that green tea, black tea and constituent polyphenols protect against chemical- and ultraviolet B (UVB)-induced carcinogenesis and reduce the growth of established tumors in skin” (see Abstract). Bickers et al also teach that “we have found that oral administration of a standardized green tea extract (SGTE) prior to and during treatment of SKH-1 mice diminished PUVA-induced skin hyperplasia and hyperkeratosis (pre-cancerous skin lesion)” (see Abstract); “Topical application of SGTE to human skin prior to PUVA-treatment inhibited the delayed skin inflammatory response”; “Similarly, oral and topical administration of standardized black tea extract and its two major polyphenolic sub-fractions protect against UVB-induced erythema in SKH-1 mice” (see Abstract). Bickers et al state that “both black and green tea and their constituents inhibit the tumor initiation, promotion and malignant progression stages of multi-step skin carcinogenesis” (page 693, 1st column, 2nd paragraph). Bickers et al indicate that “several experimental studies conducted in human skin have shown the efficacy of tea constituents as inhibitors of carcinogenesis-associated surrogate markers or inflammation (page 693, 2nd column, 2nd paragraph). Bickers et al conclude that “we also observed that topically applied green tea is effective in abrogating PUVA-induced inflammatory responses in human skin” (page 693, 2nd column, 2nd paragraph).

As evidenced by Dou et al (US 2002/0151582), green tea contains polyphenol compounds EGCG (formula I and II in claims 13 and 14 are thus met), ECG, GCG, or CG (claim 3).

Bickers et al do not teach additive isopropyl myristate, form of ointment, or combined with different treatment curettage, or the claimed amount of the polyphenols.

Brash et al teaches that skin precancers are being treated, the preferred mode of administration is topical. The topical application may contain carrier, excipient or vehicle ingredients such as isopropyl myristate etc., and mixtures thereof to form lotions, creams, emulsions, gels, or ointments [0086].

Voet teaches that the current management options for visible or easily perceived and diagnosed precancerous dermatological lesions such as AKs (thus claim 35 is met) include cryosurgery with liquid nitrogen, topical treatment, and curettage (col 2, lines 15-20). Voet also teaches that curettage, which involves the use of a curette to scrape away the lesion, is another common method of treatment for easily perceptible precancerous skin lesions. The primary advantage of curettage is the ability to submit the specimen for histologic analysis.

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to use the carrier isopropyl myristate and ointment form of Brash et al, and the treatment of curettage from Voet in the current invention since carrier isopropyl myristate and ointment form are the conventional carrier and pharmaceutical form that have been used successfully in treating precancerous lesions in the topical route according to Brash et al; and combining the treatment curettage from Voet with the topical could monitor the histologic status of the tissue treated by topical administration. Since both Brash et al, and the treatment of curettage from Voet yielded beneficial results in treating precancerous lesions, one of ordinary skill in the art would have been motivated to make the modifications. The result-effective adjustment in conventional working parameters (e.g., determining an appropriate

amount of the each polyphenol components as claimed isolated from green tea within the composition) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Since Bickers et al teach administering green tea extract (SGTE) prior to and during treatment of SKH-1 mice diminished PUVA-induced skin hyperplasia and hyperkeratosis, and hyperkeratosis is not a hyperplasia, Condyloma acuminata, warts, and cervical intra-epithelial neoplasia, thus the limitation of claim 5 is met.

From the teachings of the references, it is apparent that one of the ordinary skills in the art would have had a reasonable expectation of success in producing the claimed invention.

Thus, the invention as a whole is *prima facie* obvious over the references, especially in the absence of evidence to the contrary.

*This reference is cited merely to relay an intrinsic property and is not used in the basis for rejection *per se*.

Applicant's arguments with respect to the rejection(s) of claim(s) under Li et al and Jia et al have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bickers.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qiuwen Mi whose telephone number is 571-272-5984. The examiner can normally be reached on 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

QM

/Christopher R. Tate/
Primary Examiner, Art Unit 1655